

A MOLECULAR MANIPULATOR, A METHOD OF MAKING THE SAME, AND A METHOD OF MOVING A NANOSTRUCTURE

ABSTRACT

- 5 A molecular manipulator includes a light-sensitive molecule, including a double bond,
which changes a *cis-trans* configuration of the double bond in response to illumination by
light of a selected wavelength, and a probe, for example, a probe of a scanned-proximity
probe microscope, to which the light-sensitive molecule is attached. A method of making the
molecular manipulator includes covalently bonding the light-sensitive molecule to the probe.
- 10 A method of moving a nanostructure includes controllably grasping, moving, and releasing
the nanostructure with the molecular manipulator.

15